

REMARKS

The Office Action dated February 15, 2006 has been received and carefully noted. The above amendments to the claims and the following remarks are submitted as a full and complete response to the Office Action.

Claims 1, 6, 9, and 14 are amended to particularly point out and distinctly claim the subject matter of the invention, and to correct typographical informalities. No new matter is added. Claims 1-15 are respectfully submitted for consideration.

The Office Action objected to claim 6 because of informalities. Applicants respectfully submit that claim 6 is amended as suggested in the Office Action. Accordingly, withdrawal of the objection to claim 6 is respectfully requested.

The Office Action rejected claims 1, 9, and 14 under 35 U.S.C. 112, second paragraph for being indefinite. Specifically, claims 1, 9, and 14 contained limitations that did not have proper antecedent basis. Applicants respectfully submit that the amendments to claims 1, 9, and 14 overcome the rejections of these claims. Accordingly, withdrawal of the rejection under 35 U.S.C. 112, second paragraph is respectfully requested.

The Office Action rejected claims 1-7 under 35 U.S.C 103(a) as being obvious over EP 0981229 to Hwang et al. (Hwang), in view of US Patent No. 6,285,665 to Chuah (Chuah), in further view of US Patent No. 6,097,733 to Basu et al. (Basu). Further, the Office Action rejected claims 8-10 and 13 under 35 U.S.C. 103(a) as being obvious over Basu, Hwang and in further view of Chuah. The Office Action took the position that

Hwang disclosed all of the features of these claims with the exception of an indication that is a coded value of the length of the data queue, which is allegedly disclosed by Chuah, and the feature of a controller for a second network element, which is allegedly disclosed by Basu. This rejection is respectfully traversed.

Claim 1, from which claims 2-4, 6 and 7 depend, recites a method of controlling communication resources in a transmission from a first network element to a second network element, where the communication resources are allocated by a controller. The method includes monitoring an indication of future need of communication resources in said first network element. The method further includes sending the indication from the first network element to the controller, wherein the indication is a coded value of the length of the data queue. The method further includes controlling the communication resources between the first network element and the second network element based on this indication.

Claim 5 recites a method of controlling communication resources in a transmission from a first network element to a second network element across a network, where the communication resources are allocated by a controller in the network. The method includes monitoring an indication of future need of communication resources in the first network element, and sending the indication from the first network element to the controller. The method further includes controlling the communication resources between the first network element and the second network element based on this indication. In the method, the controller is separate and independent from the first

network element and the indication includes information about a transmit buffer of the first network element, wherein the indication includes coded values corresponding to predefined resources.

Claim 8, from which claims 9-13 depend, recites a system for controlling communication resources in a network. The system includes a plurality of first stations, a second station connected to the plurality of first stations through a plurality of communication links and a controller for controlling the allocation of the communication resources among the links, the controller being separate and independent from the first stations. In the system the allocation is performed in accordance with information transmitted from the first stations which indicates a need for communication resources based upon the lengths of data queues in the first stations. Further, in the system the information is a coded value of the lengths of the data queues.

Applicants submit that the above claims recite features that are neither disclosed nor suggested in any of the cited references.

Hwang is directed to controlling asymmetric dynamic radio bearers in mobile packet data communications. Hwang discloses a media access controller (MAC), which is a part of the mobile station (see Figure 1). The MAC examines the amount of data stored in a transmit buffer during transmission of mobile packet data in order to increase or decrease the number of the plural radio bearers established, and for establishing a plurality of radio bearers used to send the transmit data at a data rate corresponding to the radio data service (column 4 lines 18-25). Once the amount of data in the transmit buffer

is examined in predetermined time intervals, the amount of stored data is compared with threshold values, and the radio packet data service is provided with a number of plural radio bearers for a predetermined data rate. See column 5 lines 18-55. The Office Action admits that Hwang fails to disclose the feature of an indication that is a coded value of the length of the data queue. The Office Action alleges that Chuah discloses this feature.

Chuah is directed to a method for the establishment of the power level for uplink data transmission in a multiple access system for communications networks. Chuah describes that the power level in a wireless network having a base station and several remote hosts is established by first transmitting a short connection request message to the base station from one of the remote hosts at an initial power level that is set relative to the nominal open loop level. As stated above, the Office Action relies on Chuah to disclose the feature an indication is a coded value of the length of the data queue. However, it appears that Chuah fails to disclose or suggest this feature. Chuah merely describes sending, to an access point an uplink queue size information that is piggy-backed on the uplink data transmission. However, Chuah does not disclose or suggest that this queue size information is coded. (See column 34 lines 27-35 of Chuah). Further, it is respectfully submitted that Basu fails to cure the deficiencies of Chuah.

Basu is directed to a system and associated method of operation for managing bandwidth in a wireless communication system supporting multimedia communications. Basu appears to disclose a plurality of wireless mobile units (Figure 1 104a-c); a base station (Figure 1 102) (col. 4 lines 55-57) and a base switching center for allocating

bandwidth (BSC, Figure 2 and column 7 lines 11-28). The Office Action relies on Basu to disclose the feature of a controller for a second network element. However, Basu does not cure the deficiencies of Hwang and Chuah discussed above.

Based at least on the above, Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of claims 1-7, 8-10 and 13. Accordingly, withdrawal of the rejections of claims 1-7, 8-10 and 13 under 35 U.S.C. 103(a) is respectfully requested.

The Office Action rejected claims 11 and 12 under 35 U.S.C. 103(a) as being obvious over Basu, Hwang and Chuah, in further view of US Patent No. 6,975,604 to Ishida et al. (Ishida). The Office Action asserted that Basu, Hwang and Chuah disclosed all of the features of these claims with the exception of a data generator, an encoder and a transmitter for transmitting said data with said code included therein as a field. The Office Action asserted that Ishida discloses these features. Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features of any of the above claims.

Basu, Hwang and Chuah are discussed above. Ishida is directed to a base station controller and a mobile station to achieve high speed transmission and effective use of radio resources in a radio communication systems. Ishida further appears to disclose a mobile station 105 that includes an encoder circuit 616 and a frame generator circuit 617. Further, Ishida discloses a decoding circuit 505 (See Figures 5 and 6 of Ishida).

However, Ishida fails to disclose or suggest the feature of an encoder for generating a code representative of the length of the data queue, as recited in claim 11, or a decoder for decoding a field of said data and producing an indication of the data queue in an associated first station, as recited in claim 12. At best, Ishida discloses an encoder circuit 516 that performs error correction encoding of the output of the frame generator circuit (see column 9 lines 16-18 of Ishida) and a decoding circuit that along with a deinterleaver circuit 504, performs error correction after orthogonal spreading (see column 10 lines 59-61).

Still further, it is well established in US Patent law that a piecemeal analysis of a number of references, to extract a number of individual elements which are picked and chosen to recreate the claimed invention, is improper absent some teaching or suggestion in the references to support their use in the particular claimed combination. It is improper to use applicant's own disclosure for any such motivation or incentive. Interconnect Planning Corporation v. Feil, 227 USPQ 543 (Fed. Cir. 1985), Symbol Tehnologies Inc. v. Opticon, Inc., 19 USPQ 1241 (Fed. Cir. 1991), In re Rothermel and Waddell, 125 USPQ 328 (CCPA 1960), In re Jones, 21 USPQ 2d 1941 (Fed. Cir. 1992).

The Office Action cites Basu, Hwang, Chuah and Ishida in a piecemeal manner, picking and choosing elements, in an effort to reconstruct the elements of the above mentioned claims. The cited combination is a result of improper hindsight because there is no motivation, outside of the Applicants' disclosure, to form the cited combination of references.

Based at least on the above, Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the above claims. Accordingly, withdrawal of the rejection of claims 11 and 12 under 35 U.S.C. 103(a) is respectfully requested.

The Office Action rejected claims 14 and 15 under 35 U.S.C. 103(a) as being obvious over Ishida in view of Chuah. The Office Action took the position that Ishida disclosed all of the features of these claims with the exception of a code that is representative of a length of the data queue in at least one mobile station, and queue length. The Office Action stated that Chuah disclosed this feature. Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features of any of the pending claims. Ishida and Chuah are discussed above.

Claim 14 is directed to a base station. The base station includes a receiver, a decoder for decoding a code representative of a length of a data queue in at least one mobile station, and a controller for controlling allocation of communication resources. The decoder provides queue length information for the at least one mobile station to the controller.

Claim 15 recites a mobile station. The mobile station includes a data generator, a data queue, and an encoder for generating a code representative of a length of the data queue. The mobile station further includes a transmitter for transmitting data with the code included therein as a field.

Applicants respectfully submit that Ishida fails to disclose or suggest at least the feature of a decoder for decoding a code representative of a length of a data queue in at least one mobile station as recited in claim 14, and an encoder for generating a code representative of the length of the data queue, as recited in claim 15. As discussed above, at best, Ishida discloses an encoder circuit 516 that performs error correction encoding of the output of the frame generator circuit (see column 9 lines 16-18 of Ishida) and a decoding circuit that along with a deinterleaver circuit 504, performs error correction after orthogonal spreading (see column 10 lines 59-61). Further, Chuah fails to cure the deficiencies of Ishida as discussed above.

Applicants respectfully submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in claims 14 and 15. Accordingly, withdrawal of the rejection of claims 14 and 15 is respectfully requested.

Applicants respectfully submit that each of claims 1-15 recite features that are neither disclosed nor suggested in any of the cited references. Accordingly, Applicants respectfully request that each of claims 1-15 be allowed and the present application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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